# West Virginia

**DWSRF Set-Aside** 

**Supplemental Grant Funds** 

**Progress Activity Report** 

**For Time Period** 

**January 1, 2011 – June 30, 2011** 

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### **Summary of Program Implementation**

OEHS provides EPA with a PWSS/SRF update at the mid-year and at the end of year to report on PWSS/SRF grant work plan activities. Please refer to that update for the normal work plan status. This Supplemental Grant Funds Progress Activity Report will update the status of the redirection activities.

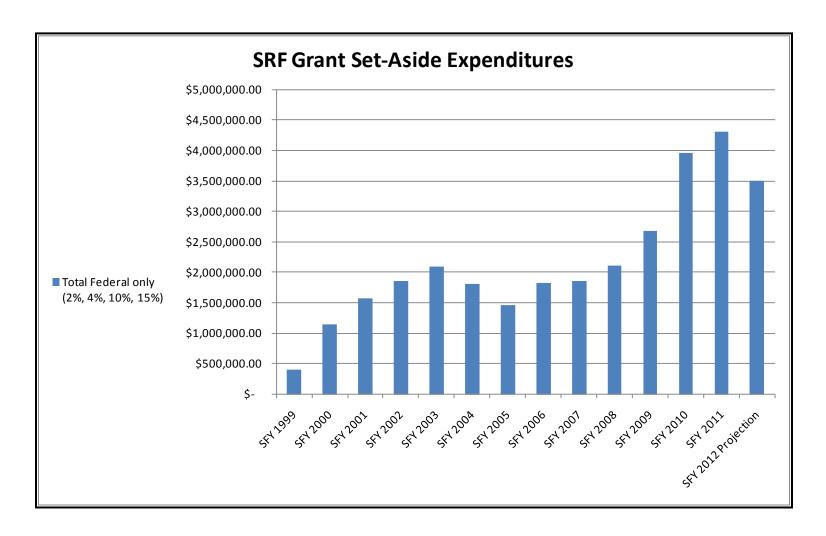
These funds became available due to vacancies, frozen salaries, and under runs in other budget items from vacancies. The Supplemental Work Plan will be used to further implement programs such as capacity development assessments for most, if not all, community water systems throughout the state. Grants will be provided to water systems for planning projects, developing needs assessments, construction design to close loans quicker, and source water protection. Contractors will be used to develop mapping for water systems, training courses and certification program for water system management staff, water distribution operator, and chief operator.

This Progress Report will address those one time supplemental grant activities approved by EPA in May 2007. During the EPA April 2007 s ite visit, it was decided to withdraw the unexpended grant funds in the 4% set-aside since they were not to be included in the tracking of available set-aside funds. None of the 2% set-aside was to be used since there is very little balance left over at the end of each fiscal year. Since the funding of the supplemental grant activities cross into both the 10% and 15% set-asides, each activity will be addressed and the financial status for each set-aside will follow at the end of this report. Any significant uncommitted funds will be redirected into different areas and will be requested in the next grant application.

Significant progress in expenditures has been made for the last three reporting periods. The table below summarizes the progress made on commitments, obligations, and disbursements for redirected activities. The supplemental activities have resulted in total commitments of \$6,102,387; total obligated (contract or grant agreement) amount of \$5,777,791; and a total disbursement amount of \$4,250,931 through June 2011. Obligated (under contract or grant agreement) funds not yet expended total \$1,526,861.

		Committed	d/0	bligated Redire	ecti	on Summary Sl	hee	t				
Balances as of 6-30-11		Budget						Cumulative			Ob	ligated money
		Amount		*Committed		**Obligated	C	Disbursements	*	**Uncommited	ı	Jnexpended
Activity F/15% Preliminary Evaluation & Design Grants	\$	2,056,344.59	\$	2,056,344.59	\$	2,056,344.59	\$	(1,376,854.78)	\$	-	\$	679,489.81
Activity A/15% & Activity B/10% Capacity Development Technical Assistance	\$	345,040.00	\$	345,040.00	\$	345,040.00	\$	(194,040.00)	\$	-	\$	151,000.00
Activity A/15% & Activity B/10% Lab Equipment	\$	438,321.26	\$	438,321.26	\$	218,321.26	\$	(218,321.26)	\$	-	\$	-
Activity K/15% & Activity L10% Source Water Technical Assistance	\$	1,244,624.00	\$	1,244,624.00	\$	1,244,624.00	\$	(706,135.54)	\$	-	\$	538,488.46
Activity B15% & Activity C10% GIS Mapping (GPS) Grants		\$569,077.57		\$569,077.57		\$569,077.57	\$	(468,679.51)	\$	-		\$100,398.06
Activity C15% & Activity D10% AWOP Studies/Distribution Optimization	\$	177,176.00		\$177,176.00		\$134,176.00	\$	(134,176.00)	\$	-		\$0.00
Activity E/10% Source Water Security Enhancements Grants		\$200,000.00		\$190,283.36		\$141,187.36	\$	(132,847.36)		\$9,716.64		\$8,340.00
Activity E15% & F10% Source Water Protection Mini Grants	\$	765,200.00	\$	750,706.53	\$	738,206.53	\$	(689,062.33)	\$	14,493.47	\$	49,144.20
Activity D15% WV Utility Management Institute	\$	222,709.00	\$	197,709.00	\$	197,709.00	\$	(197,709.00)	\$	25,000.00	\$	-
Activity G10% Operator Certification	\$	135,000.00	\$	133,105.00	\$	133,105.00	\$	(133,105.00)	\$	1,895.00	\$	<u>-</u>
	\$	6,153,492.42	\$	6,102,387.31	\$	5,777,791.31	\$	(4,250,930.78)	\$	51,105.11	\$	1,526,860.53
*Committed: Includes recipient contracts that are certified and recipients with final contrac **Obligated: Final contracts signed. **Uncommitted: Includes recipient contracts not notified of the award and/or selected.	ts signed.											

The SRF Grant Set-Aside Expenditure chart shows the dramatic increase in spending as a result of the redirected activities since the 2007 year. At the end of 2011 we have expended over \$4.3 million which met the forecast for the year. About half of this year's expenditures are the result of implementing the redirected activities.



### I. Activity F (15%): Preliminary Evaluation, Planning, and Project Design Grants

- II. Activity F (15%) Description: This a ctivity will provide grant funds to small water systems to determine their needs and expedite projects to the construction phase. This activity will offer technical assistance grants to private and public community water systems for system assessment to:
  - Perform source water quantity and quality studies.
  - Drill exploratory wells determining source feasibility.
  - Test system water loss.
  - Perform other studies as needed.
  - Identify compliance issues via feasibility study.
  - Develop preliminary engineering reports for funding applications.
  - Prepare design plans and specifications.
  - Conduct income surveys.

#### **III. Outcomes/Benefits:**

No.	Planned Outcomes	Outcome Status
1.	Projects funded and constructed more rapidly.	Preliminary engineering reports and funding of designs will enable water systems to implement projects faster.
2.	Water systems returned to compliance.	Returning systems to compliance is a factor in determining the priority of the systems for grant funds.
3.	Water systems avoid future non-compliance.	These grant funds will enable water systems to be eligible for projects to meet future regulations.
4.	Water systems' source and infrastructure needs better understood.	The grant funds will help water systems understand their needs by performing studies of their facilities.

- **IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.
- **V. Resources:** This activity will use \$654,489 from the 15% set-aside unexpended funds over the next year period. To-date this activity has disbursed \$1,376,855.

Another preliminary planning and evaluation grant program is being planned for the next year. Funds from the 4% set-aside will be used for this next round of planning/evaluation grants. The amount planned is \$500,000 from the 4% set-aside.

VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	All grants used effectively.	All grants will be for eligible projects and oversight provided by OEHS.
2.	Completed evaluation reports used for subsequent projects.	Completed reports will be required for each project and will be used for subsequent construction projects.
3.	Preliminary engineering reports completed for funding applications.	Preliminary engineering reports will be used for submitting IJDC funding applications for construction projects.
4.	Design plans and specifications completed, expediting project funding and construction.	Grant funds used for completion of design plans and specifications will aid in moving projects to construction quickly.
5.	Completed income surveys demonstrate disadvantaged status.	Grants for income surveys will have to provide legitimate reasons why the income survey should be justified prior to awarding the grant.

Progress Report of Supplemental Grant Funds Workplan: Thirteen of the selected grantees, representing \$1,266,855 have completed the requirements of their subrecipient agreements. Three of the grantees have substantially completed their grant requirements and have expended \$195,133 of \$371,490 awarded for these three grants. All requirements for these three grants will be completed in the first quarter of SFY 2012. Three grantees representing \$393,000 are in initial stages of completing the requirements specified by their subrecipient agreements. The table below shows the expenditures of the grantees and the percent complete.

### **Summary of Planning and Design Grants**

Grantee Name	Amount of Grant	Expenditure	Percent Complete
Oakvale Road PSD	\$200,000	\$200,000.00	100
City of Piedmont	\$40,000	\$40,000.00	100
Jefferson Utilities	\$200,000	\$200,000.00	100
New Haven PSD	\$94,750	\$89,360.50	100
City of Cameron	\$68,000	\$68,000.00	100
Gilmer County PSD	\$30,000	\$30,000.00	100
Oakland PSD	\$192,000	\$192,000	100
Webster County	\$18,000	\$17,994.09	100
Webster Co. Countywide Study	\$55,000	\$55,000.00	100
McDowell County PSD	\$90,000	\$90,000.00	100
Southern Jackson County PSD	\$49,500	\$19,014.41	100*
Mineral County	\$92,990	\$47,515.95	51
Sugar Creek PSD	\$200,000	\$90,518.87	45
Town of Fairview	\$200,000	\$175,252.80	100
Nettie-Leivasy PSD	\$200,000	0	0
City of Stonewood	\$35,000	\$5,100	100*
Cowen PSD	\$78,500	\$57,098.16	73
Page-Kincaid PSD	\$150,000	0	0
Town of Matoaka	\$68,000	0	0
Total =	\$2,061,740	\$1,376,854.78	
* Grant requirements are complete a	and final invoice was submitted bu	t not paid as of June 30, 2011.	

**Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):** The Preliminary Evaluation, Planning, and Project Design Grant program is nearing completion. \$1,376,854.78 has been disbursed to-date for this activity.

### I. Activity B (10%) & A (15%): Capacity Development Assistance Program

**II.** Activity B (10%) & A (15%) Description: This a ctivity will be a standalone project s eparated from the S ource W ater Assessment and P rotection project. This a ctivity will help water s ystems achieve technical, managerial, and financial (TMF) capacity. This activity will identify public water systems (PWS) lacking TMF capacity and coordinate assistance.

A contractor will be procured to:

- Develop a survey tool to assess TMF.
- Complete an on-site survey of all Community Water Systems using the Capacity Development Program (CDP) questionnaire.
- Submit survey results to CDP staff.
- Identify PWSs needing TMF assistance and willing to work with the contractor. Examples include management policies, procedures, plans, budgets, financial planning, and security plans.

#### III. Outcomes/Benefits:

No.	Planned Outcomes	Outcome Status
	BPH has comprehensive knowledge of PWSs' TMF	Contractor completed the development of the information tool
1.	capacity.	on October 31, 2009. Contractor secured in mid-June 2011.
	capacity.	Contractor met with BPH in late June and early July.
2.	Water systems have necessary written plans and procedures.	Contractor will begin scheduling surveys of community water
	water systems have necessary written plans and procedures.	systems in August with surveys beginning in September.
		Contractor will begin scheduling surveys of community water
	Improved TMF capacity results in viable systems.	systems in August with surveys beginning in September.
3.		Contractor has been supplied with tools and resources to
		provide to water systems while conducting onsite surveys.
		TMF improvements are expected to take some time to
		implement once the surveys are completed.
		This long term goal will not be immediately measured or
4.	Viable systems improved public health protection.	realized. Following the current schedule of system viability
4.		scores every 3 years, the next report of viability of systems
		will occur in 2014.

- **IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.
- **V. Resources:** This activity is planned to use \$44,000 from the 10% set-aside and an additional \$107,000 from the 15% set-aside unexpended funds. The total planned for this activity for the next year is \$151,000 from both set-asides

VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	Capacity Development Survey Tool completed	Contractor completed the development of the information tool on October 31, 2009. A separate contractor was secured in mid-June 2011 to conduct the surveys with water systems.
2.	Capacity Development Program surveys completed.	Contractor secured in mid-June 2011. Contractor met with BPH in late June and early July. Contractor will begin scheduling surveys of community water systems in August with surveys beginning in September.
3.	A list of PWSs needing TMF assistance developed.	Contractor will begin scheduling surveys of community water systems in August with surveys beginning in September. Contractor has been supplied with tools and resources to provide to water systems while conducting onsite surveys. The contractor will provide to BPH a list of PWSs each month, the survey results, and any notes of special needs identified onsite. BPH staff can begin making contact with systems following the contractor reports each month.
4.	Assistance provided to receptive PWSs.	Contractor will begin scheduling surveys of community water systems in August with surveys beginning in September. Contractor has been supplied with tools and resources to provide to water systems while conducting onsite surveys. The contractor will provide to BPH a list of PWSs each month, the survey results, and any notes of special needs identified onsite. BPH staff can begin making contact with systems needing follow-up assistance pending the contractor reports each month.

**Progress Report of Supplemental Grant Funds Workplan:** OEHS has executed a grant agreement with the West Virginia University National Environmental Services Center (WVU-NESC) in September 2008 to develop a survey tool in the amount of \$194,040 over a one year period. A two-month no cost extension was approved for the contract with the work to be completed by October 31, 2009. The survey tool was completed on October 31, 2009.

OEHS began developing the second phase of the project which uses the tool in the field at water systems throughout the state. A Request for Quote (RFQ) was prepared in order to seek a qualified vendor for the second phase. The RFQ approval process was significantly delayed in reviews that occurred in the State's Technology and Purchasing programs. Finally, in June 2011, a vendor was selected and a contract secured. Following contract award, the contractor met with BPH staff on 2 occasions with tools and resources being provided to the contractor subsequently. Work has begun that will, in subsequent steps:

- Identify water systems lacking technical, managerial, and financial (TMF) capacity
- Teach water systems the impacts of and corrective measures for inadequate TMF capacity
- Identify water systems willing to work with the contractor and correct identified TMF capacity problems

Explanations of Variance (\$) and Deviation from Plans (schedules and outputs): The grant agreement was in place in September 2008. WVU-NESC completed the work survey tool on October 31, 2009. The Request for Quote (RFQ) has been delayed due to reviews from the Information Technology and Purchasing groups with the state government for this reporting period. A vendor was chosen and a contract secured in June 2011. \$194,040 has been disbursed to-date for this activity.

### I. Activity L (10%) & K (15%): Source Water Assistance Program

II. Activity L (10%) & K (15%) Description: This activity will implement wellhead and source water protection activities associated with the WV Source Water Assessment and Protection (SWAP) program. A contractor will provide management and technical assistance to communities, helping develop, update and implement source water protection plans. OEHS will assign project areas or individual PWS systems to contractor(s). The contract work will focus on community water systems (CWS), especially small CWSs.

The Contractor will:

• Revise the potential contaminant inventory as needed.

- Determine appropriate source water protection measures on a local basis.
- Develop system specific management and contingency plans.
- Identify projects that PWSs can accomplish.
- Provide PWS system assistance.

#### III. Outcomes/Benefits:

No.	Planned Outcomes	Outcome Status
1.	Local educational efforts increased source water protection.	Source Water Protection assessments have been completed on 104 community systems to promote local educational efforts.
2.	Local communities increased involvement in source water protection efforts and measures.	Source Water Protection assessments have been completed on 104 community systems to increase involvement in water protection efforts.
3.	Community source water protection efforts and measures improved.	Source Water Protection assessments have been completed on 104 community systems improving community source water protection efforts.
4.	Guidance documents support additional local efforts.	Source Water Protection assessments have been completed on 104 community systems developing the local source water protection plan.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity is planned to use \$1,244,624 from the 10% set-aside unexpended funds. \$706,136 has been disbursed to-date for this activity. The remaining unexpended amount is \$538,488 from the 10% set-aside.

### VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	Wellhead protection activities implemented.	Assessments have been completed on 104 community systems.

2.	Local efforts created enhanced protection plans.	Assessments have been completed on 104 community systems providing local enhanced protection plans.
3.	Standardized plans were accessible to interested parties.	Assessments have been completed on 104 community system providing accessible standardized plans to interested parties.
4.	SWAP and WHP plans approved.	SWAP and WHP plans approved for 104 community systems.
5.	Initial and updated source water reports issued.	Assessments have been completed and issued on 104 community systems.
6.	Local source water protection plans and educational brochures developed.	Assessments have been completed on 104 community systems with plans and educational brochures developed.
7.	Protection activities implemented.	Assessments have been completed on 104 community systems with protection activities implemented.
8.	System specific contingency and management plans prepared.	Assessments have been completed on 104 community systems with system specific contingency and management plans prepared.
9.	A finalized PWS management guidance document is available for local use.	Guidance document for PWS management plans has been developed
10.	A finalized PWS contingency guidance document is available for local use.	Guidance document for PWS contingency plans has been developed

**Progress Report of Supplemental Grant Funds Workplan:** Source Water Protection Technical Help Program (SWPTHP) - The proposed contract requires a consulting engineer firm to work with drinking water systems across the state (initially within the St. Albans and the Wheeling District Offices) for the purpose of developing and implementing the components of a local Source Water Protection (SWP) program. Local SWP efforts not only protect public health and safety by preventing drinking water contamination but they can also help avoid the need for costly treatment, increased monitoring and remediation of contaminated drinking water sources.

WV State purchasing has approved the contract for the Wheeling and St. Albans Districts SWPTHP program with Potesta Inc. on March 29, 2009, in the amount of \$453,000. It is anticipated that up to 60 (28 ground water and 32 surface water) community water systems will be assisted during the contract period.

WV State purchasing has approved the contracts for the Beckley, Philippi and Kearneysville Districts SWPTHP program with Tetra Tech on September 15, 2009, in the amount of \$791,624. It is anticipated that up to 106 (32 ground water and 74 s urface water) community water systems will be assisted during the contract period.

Protection plans (management and contingency reports) have been completed for 104 community public water supply systems.

SWAP program will award and monitor contract work activities.

**Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):** No variance or deviation from plans required at this time. Vendor's purchase order for the Wheeling and St.Albans District's SWPTHP program was approved on March 29, 2009, and has been renewed until March 29, 2012. Vendor's purchase order for the Beckley, Philippi and Kearneysville District's SWPTHP program was approved September 15, 2009, and has been renewed until September 15, 2012. \$706,136 has been disbursed to-date for this activity. Total planned for this activity is \$1,244,624.

### I. Activity C (10%) & B (15%): Geographic Information System Mapping

II. Activity C (10%) & B (15%) Description: This activity will create a pilot Global Position System (GPS)/field measurement water system infrastructure inventory within the southern WV Region I Planning & Development Council (Region I) areas. It will acquire asset inventory for municipalities and public service districts (PSDs) within Region I.

A contractor will:

- Initiate a GPS asset inventory pilot program for a minimum of six systems. System size and complexity will vary.
- Estimate project cost for completing remaining Region I systems.
- Use GPS equipment/field observations to inventory water system infrastructure locations (e.g., hydrants, pump stations, and valves).
- Input feature attributes (e.g., manufacturer, installation dates, and maintenance history) into GPS receiver/field notes.
- Maintain secure data copy.
- Issue a project summary report.

The contractor will build a pilot Region I Geographic Information System (GIS) mapping for participating public water systems. The contractor will establish a GIS database for system analysis, maintenance planning, and repair facilitation.

This GIS system will:

- Incorporate GPS/field measurement data into computerized mapping (GIS) program.
- Incorporate previously established Computer Aided Drafting and Design (CADD) mapping into GIS program.
- Digitize system features not feasibly mapped by GPS inventory (e.g., lines).
- Connect distribution and branch lines to hydrants, valves, and pump stations, etc. using GIS.
- Assign system attributes (e.g., line diameter, line material, flow direction, flow rates, installation dates, photographs, and schematics) to features using GIS program's inherent database compilation capabilities.

This activity will provide water system GIS data analyses that will provide assistance and location materials increasing system viability.

The GIS system will:

- Provide water system administrator with GPS and GIS datasets.
- Provide water system administrator with GIS data "viewer".
- Provide GIS data to other interested parties.

#### III. Outcomes/Benefits:

No.	Planned Outcomes	Outcome Status
1	Municipalities/PSDs have accurate, geo-referenced	Municipalities will have accurate, geo-referenced inventory
1.	inventory used for asset inventory and maintenance.	of assets.
	State and Federal agencies (if applicable) have inventory	OEHS will have access to the inventories generated from
2.	for use analyzing system assets and infrastructure	this activity to aid in analyzing system assets and
	efficiency.	infrastructure.
3.	Personnel provided information locating assets for	Water systems will have easy access maps and inventory
	emergency repairs and routine maintenance.	lists to aid in repairs/maintenance.
4.	System administrators provided quality mapping suitable	Water systems will have updated maps of their facilities to
''	for system planning and other tasks.	aid in future planning and upgrading.
5.	Governmental agencies and others have access to water	OEHS will have access to the water system mapping
J.	system mapping information.	information generated from this activity.

6.	Water systems have a more accurate asset inventory.	Water systems will have an accurate asset inventory for improved capital planning.
7.	Water system CalS data protected	The GIS data will be protected from outside sources to protect public health.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity has disbursed \$468,680 through this fiscal year. This activity is planned to use an additional \$100,398 from the 15% set-aside unexpended funds. The total planned for this activity is \$569,077 from both set asides.

VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	Municipalities/PSDs (as well as State officials, upon request) are provided current, geo-referenced digital and hardcopy asset inventory.	Digital and hardcopy asset inventories will be required as a condition of final invoice payment.
2.	Project summary report completed.	A project summary report will be required for each water system participating in this activity.
3.	Detailed geo-referenced system mapping incorporating high-resolution color aerial photography is completed and available in digital and hardcopy formats.	Detailed geo-referenced mapping using high-resolution color aerial photography will be available in digital and hardcopy formats.
4.	Detailed database files (integrated into GIS data) are suitable for analysis by other GIS users.	The database files will be standardized and suitable for use by other GIS users.
5.	Detailed digital data uploaded into GIS-capable GPS receivers.	The digital data will be uploaded into GIS-capable GPS receivers.
6.	System administrators provided with GIS viewer and GIS/GPS data.	System administrators will be provided with GIS viewer and GIS/GPS data.
7.	Data viewed and analyzed, but not altered.	Water systems will have the ability to view data and do analysis, but will not be able to alter the maps and data without revisions provided by Region 1.

### **Progress Report of Supplemental Grant Funds Workplan:**

Region 1 progress is listed in the table below.

No.	Water System	Output Status
1.	Raleigh County PSD	GIS Mapping was completed in April 2010.
2.	Raleigh County PSD (Drews Creek Addition)	GIS Mapping was completed in July 2010.
3.	Bluewell PSD	GIS Mapping completed in December 2010.
4.	Big Bend PSD	GIS Mapping completed in December 2010.
5.	Town of Athens	GIS Mapping completed in August 2010.
6.	Ravencliff-McGraw-Saulsville PSD	GIS Mapping has been postponed due to insufficient water system staff time to participate in mapping activity.
7.	City of Welch	GIS Mapping completed in November 2010.
8.	Town of Iaeger	GIS Mapping completed in December 2010.
9.	Town of Oceana	GIS Mapping completed in February 2011.
10.	Town of Union	GIS Mapping completed in April 2011.
11.	Eastern Wyoming PSD (Itman & Bud Mountain area)	GIS Mapping completed in March 2011.
12.	Town of Athens	GIS Mapping completed in March 2011.

13.	Kopperston CWS	GIS Mapping completed in June 2011.
14.	Gap Mills CWS	GIS Mapping started in March 2011.
15.	McDowell County PSD (Green Valley-Glenwood areas)	GIS Mapping started in May 2011.

### **Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):**

To-date Region 1 has submitted invoices totaling \$468,680. The third year agreement was awarded in January for an additional \$160,000. \$100,398 is the remaining amount of redirected funds budgeted for this activity.

### I. Activity D (10%) & C (15%): Area Wide Optimization Program Performance Based Training

**II. Activity D** (10%) **Description**: This activity implements Performance Based Training (PBT) within the EPA's Region III Area Wide Optimization Program (AWOP) guidelines during five training sessions over a fifteen month period. A contractor will remain engaged to help co-present public water system operator's material to optimize their treatment plant (microbial) and distribution system performance (DBP series). WV is involved in two separate PBT series: (1) The 2<sup>nd</sup> microbial series with the assistance of an approved EPA sub-contractor using an "in-kind" agreement; and (2) the EPA R3 Disinfection By-Product Train-the Trainer Pilot. Both series are anticipated to run from late 2011 thru 2013.

Contractor activities are:

- Participation of water system management/owners and water system operators in the AWOP/PBT program.
- Conduct water system operator training.
- Expose operators to "special studies" in water plant treatment processes and/or distribution operations.
- Engage OEHS field representatives to facilitate the PBT activities with water operators.

Activities associated with the "DBP" series include facilitator training completed earlier in 2011; and session 1 and 2 planned August 24 and December 1, 2011. Relevant materials include:

• Participation of agency staff in the Regional EPA R3 AWOP "Train the Trainer" meetings regarding the DBP-PBT series involving 5 state drinking water programs and 18 Water Treatment Plants.

- Conduct water system operator training between the EPA R3 meetings
- Expose and support operators to "special studies" in water plant treatment processes and/or distribution operations.
- Engage OEHS field representatives to facilitate the PBT activities with water operators.

### **III. Outcomes/Benefits:**

No	Planned Outcomes	Outcome Status
1.	EPA recognizes PBT-trained operators are better equipped to achieve optimized plant performance goals in their daily activities. Operators are becoming pro-active in finding solutions to water quality issues.	Five "Microbial" PBT training sessions & follow-up session were completed in spring 2011. Operators to date have continued to use lessons learned during the PBT sessions. A network with each other and the facilitators has been established. Pro-active problem solving activities are encouraged. Changes made in operations with facilities were based on lessons learned during the PBT sessions. These pro-active changes are different to what they normal operations, which are typically reactive.
2.	Meeting optimized water treatment plant performance goals long term result in reduced particle numbers/potential contaminants, and a lower microbial public health risk	5 PBT training sessions have been completed. Sessions have enhanced water operator problem solving skills, priority setting, and leadership abilities. Involved systems have all adopted reduced turbidity goals and have continued to seek plant optimization. Involved systems overall have at least seen some improvement in overall performance and continue to seek improved performance.
3.	Graphically show improvement trends by plotting raw/settled/finished water daily trends prior, during and after 15 month training period	1 year of baseline data prior to training was reported. Data is being collected on excel software and continues to be collected at many of the participating systems involved in the 5 PBT sessions. Operators are exposed to the significance of collecting additional data and many have continued to collect and use the data since the final session.
4.	Public Health protection increases with improved operator skills and water system performance.	WV-BPH-OEHS-EED's yearly microbial "Public Health Risk" status component (used since 2004) will be used to access improvement each March. The facilitators involved during the PBT sessions continue to serve as a resource for the systems involved. Rankings are integrated with a PWS and Operator award program.
5.	Enhances West Virginia DW program field staff abilities and integrates with other DW	State DW staff has improved understanding of water treatment and gain confidence in normal work. The facilitators have better working

program areas.	relationships with the PWSs involved through the PBT event.

- **IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.
- **V. Resources:** This activity has used \$134,176 from the 10% set-aside unexpended funds as a contract through EPA as in-kind work. This activity will use \$43,000 additional funds from the 10% set-aside for OEHS program work.

Future planned expenditures for (Item #1): PBT#2 is \$88,600 from an anticipated "in kind" agreement from the new grant application for this year. (Item #2): EPA Region 3 "Train-The-Trainer" DBP-PBT lab equipment support: \$57,279.33 (Hach & CEC vendors) and "special study" certified laboratory Support: \$27,000 to 54,600 range based on amount of compliance monitoring used in, and duration of, "special studies."

VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	Water system operators will be enhanced training including mentoring during WV-PBT#2	6 PBT training sessions will be completed between 11/1/11 and 2013. (11/1&2/11 facilitator Training, S#1 12/6/11, S#2 1/24/12, S#3 4/10/12, S#4 7/10/12, S#5 & S#6 TBA) The agency facilitators and participating plant operations staff involved in the PBT sessions are a resource for the systems involved. (\$88.6 k total)
2.	Water system operators will access enhanced training including mentoring during WV-DBP-PBT series #1	6 PBT training sessions are scheduled between 8/2011 and 2013. (S#1 8/24/11, S#2 11/30/11, S#3 3/21/12, S#4 7/25,12, S#5 10/17/12, S#6 TBA) The skill set is a S2D/DBP Rule compliance resource. Four PWS will participate formally; two PWS will receive informally due to distance issues. The EPA R3 AWOP "Train the Trainer" series is planned activity through 2013 including 18 WTPs in 5 states. (\$84.2 k to \$111.9 k)

3.	Evaluation of water treatment plants for finished water quality improvements.	WV-BPH-OEHS-EED's yearly microbial "Public Health Risk" status component (used since 2004) is updated each March and circulated in-house and with the EPA-Region 3 Area Wide Optimization Program quarterly meetings. (cost integrated as part of regular DW program activities)
4.	Participation in EPA Region #3 AWOP meetings/train-the-trainer DBP-PBT series	Travel for Three (3) WV-OEHS-EED employees involved in attending the R3 "Train-the-Trainer" DBP-PBT series rotated between states on 10/18&19/11 S#2 Prep Gettysburg PA, 4/13&14/2012 S#3 prep. Culpepper, VA, 7/17&18/2012 S#4 prep in Phila., PA, S#5 prep 9/9&10/2012 Martinsburg WV, S#6prep TBA)5 meetings at \$450/employee x 3 employees = (\$6,750 thru 2013)
5.	Combination of WV's Monthly Operational Report (MOR) and EPA's Turb-OPT excel spreadsheets in a digital format to be submitted on a state secured drive together with all MORs	In planning stages including finding list of qualified venders, sharing WV-sister-agency secure portal. Cost: unknown (\$50k - \$150 k range)

#### **Progress Report of Supplemental Grant Funds Workplan:**

OEHS received approval 3/19/09 from EPA regarding the revised grant application for in-kind work for the AWOP activity. The procurement order specifics included \$134,176 for "Implementation of PBT in WV per Work Assignment No. 4-02 Contract No. EP-C-05-11 Task 10, In-Kind FS-99390006. The initial PBT proposed "scope of work" was completed as of this reporting period.

Another PBT activity will start with the new grant in-kind services. Future reporting of the new activity may be included in the PWSS semi-annual reports versus this progress activity report.

### **Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):**

No disbursements to date on this activity. A second round of PBT A second round of PBT microbial #2 training (\$88,600 quote) and the EPA Region 3 "Train-the-Trainer" DBP-PBT series (\$57,279.33 equipment & \$27,000 to \$54,600 additional certified lab costs) are being pursued to use the remaining redirected funds.

### I. Activity E (10%): Source Water Security Enhancements Grants

**II. Activity E (10%) Description**: This activity will improve PWSs source water security using grant funding. It will offer grants to install security features such as:

- Fencing.
- Cameras.
- Lights.
- Alarm systems.
- Install raw water contaminant detection equipment.

#### III. Outcome/Benefit:

No.	Planned Outcomes	Outcome Status
1.	Public health protected with improved source water security.	See schedules and output section.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity is planned to use \$200,000 from the 10% set-aside. As of 6/30/11, \$132,848 has been expended. The remaining redirected funds balance is \$67,152.

VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	Water systems facilities will have increased source water security.	<ol> <li>2008 Subrecipient Grants</li> <li>Clarksburg Water Board has completed a \$16,555 project to install a fence and camera system to provide security at their surface water intake.</li> <li>City of Fairmont has completed a \$47,575 project to install a fence to secure the raw water reservoir and a raw water intake on a second body of water.</li> <li>City of Hurricane has completed a \$9,105 project to install a</li> </ol>

fence to secure their raw water reservoir.
2009 Sub-recipient Grants
The following PWSs have been selected to enter into a sub recipient
grant award process and in some cases have been formally awarded
the funding. The amounts listed are subject to change as PWSs
adhere to procurement requirements and receive final bids. Grant
awards will be based on these bids.
1. Alpine Lake Public Utilities Company has completed a \$2,633
project to install security fence for protection of well #1 from
vehicles using gasoline and diesel fuel immediately across the
access road.
2. Glen Dale Water Works has completed a \$10,156 project to
secure existing well house with fencing and 24 hour
surveillance equipment.
3. Lubeck Public Service District has completed a \$10,164
project to install new fencing around two water wells.
4. Hundred Littleton Public Service District has been awarded
\$45,000 to install security fencing at 10 separate well sites.
The project is complete and \$ 36, 660 was spent.
5. Mason County Public Service District has applied for \$20,000
to install fencing and signage at well fields around the county.
Project determined not to be viable at this time for grant
funding, project withdrawn by Mason County PSD.
6. Armstrong Public Service District has applied for a \$17,067
project to provide security surveillance of two different raw
water intakes and buildings (pump stations). Cameras will
cover intakes and entrances to river intakes. Project determined
not to be viable at this time for grant funding, project
withdrawn by Armstrong PSD.
7. Town of Rowlesburg has applied for \$12,029 to provide
fencing, surveillance and alarms to protect source water.
reneing, survemance and ararms to protect source water.

2.	All funds used effectively.	Grant funds will be provided for eligible projects to improve their security.
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**Progress Report of Supplemental Grant Funds Workplan:** The Wellhead Protection and Source Water Protection Grant Programs were designed to offer security project grant opportunities. Grantees from these programs have been selected to receive and/or awarded funds provided for in Activity E (10%) Source Water Security Enhancement Grants.

In the 2008 grant program three (3) security projects totaling \$73,235 have been completed.

In the 2009 grant program seven (7) PWS were selected to receive a grant award. As of 6/30/11, four (4) projects have been completed, totaling \$59,613. Mason County PSD and Armstrong PSD projects are no longer viable; Rowlesburg still has the potential to be awarded approximately \$15,000 for security. This amount is estimated and is subject to change as the PWSs procure goods and services. These remaining projects and funds may be awarded during the 2011 grant periods for additional Source Water Security Enhancement Grants.

Additional PWSs have been selected to receive and/or awarded subrecipient grants through the Wellhead Protection and Source Water Protection Grant Programs as described in Activities F (10%) and E (15%).

Explanations of Variance (\$) and Deviation from Plans (schedules and outputs): No variance or deviation from plans required. Project is on schedule.

### I. Activity F (10%) & E (15%): Source Water Protection (Mini) Grants

**II.** Activity F (10%) & E (15%) Description: This activity will implement source water protection activities associated with the Source W ater A ssessment and Protection (SWAP) p rogram. It will provide g rants to community public water supply (PWS) groundwater systems establishing and implementing wellhead protection programs.

The activity will:

- Establish and develop wellhead protection activities protecting groundwater sources.
- Establish formal sub-recipient agreement with grantee, including scope of work and standards.
- Refine the wellhead protection delineations using site-specific information.

- Expand the inventory of existing and potential point and non-point contamination sources
- Initiate wellhead protection management or planning.
- Enhance wellhead protection program at the local level.

The activity will also provide grants to surface water community PWS systems, assisting them to establish and implement source water protection programs.

### This activity will:

- Establish and develop surface source water protection.
- Establish formal sub-recipient agreement with grantee, including scope of work and standards.
- Establish inter-agency agreement promoting and implementing watershed source protection benefiting community systems.
- Refine the watershed protection using site-specific information.
- Expand the inventory of existing and potential point and non-point contamination sources.
- Initiate source water protection management or planning.
- Enhance source water protection program at the local level.

This activity will also assess and characterize the hydro geologic setting of water in flooded, abandoned underground coal mines, primarily in southern WV to help determine wellhead protection delineations. It will determine water flow paths and recharge rates into abandoned coal mines from overlying strata. Develop a flow model, accounting for fractured bedrock and mine voids; applicable to other flooded, abandoned, underground mines to help determine wellhead protection delineations.

#### It will:

- Develop a multi-year joint funding agreement with the USGS.
- Collaborate with other cooperating agencies in funding USGS.
- Select one or more suitable mines, preferably a PWS water source.
- Install monitoring wells.
- Conduct borehole geophysics identifying strata physical properties.
- Collect and analyze ground water samples.
- Conduct a ground water recharge investigation including flow through a flooded abandoned coal mine.
- Characterize overlying strata hydraulic properties.
- Create fractured bedrock aquifer conceptual groundwater flow model for flooded, abandoned, underground coal mines.

#### III. Outcomes/Benefits:

No	Planned Outcomes	Outcome Status
1.	Communities' source water protection efforts and measures improved.	See Schedules and Major Outputs below.
2.	The fractured bedrock aquifer conceptual ground water flow model created.	Contract signed and is currently being implemented.
3.	A water accumulation and movement model developed for flooded abandoned coal mines.	Contract signed and is currently being implemented.
4.	Aquifer properties and characteristics database significantly revised to include data representing the southern West Virginia mining region.	Contract signed and is currently being implemented.
5.	A comprehensive report applicable to comparable geologic settings is available.	Contract signed and is currently being implemented.
6.	Knowledge obtained increased source water protection activities for PWSs utilizing abandoned mine water.	Contract signed and is currently being implemented.
7.	Water systems' source and infrastructure needs better understood.	See Schedules and Major Outputs below.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity is planned to use \$565,200 from the 10% set-aside and an additional \$200,000 from the 15% set-aside funds. The total planned for this activity is \$765,200 from both set-asides. As of 6/30/11, \$689,062 has been expended to-date. The remaining redirected fund balance is \$76,138.

VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	Wellhead protection activities implemented.	<ul> <li>2007 Sub-recipient Grants</li> <li>Three (3) PWSs were awarded and completed for a total of \$35,383. Funding for these awards was allocated in Activity E (15%). These systems included:</li> <li>1. Oakland PSD completed a security project to add surveillance and fencing to well field;</li> <li>2. Town of Union establish a Source Water Protection Plan, including protection area delineation, establishing a foundation for source water ordinances, design standards, incentive programs to protect source water in an area experiencing population growth.</li> <li>3. Town of Bath has completed an assessment of the hydro geologic conditions of the Cacapon Mountain aquifer and drafted an application for the EPA Sole Source Aquifer Designation.</li> <li>2008 Sub-recipient Grants</li> <li>Nine (9) PWS were awarded a total of \$94,865. Funding for these awards were allocated in Activity E (15%) These systems included:</li> <li>1. Alpine Lake Public Utilities Company has completed a \$5,625 project to install a fence at their primary source to allow for security and access for routine maintenance.</li> <li>2. Lubeck Public Service District has completed an \$8,500 project to install fencing at their electrical control tower that services their wellfield and at one wellhead.</li> <li>3. New Martinsville Water and Sanitary Sewer Board have completed a \$13,089 project to install a fence and camera system to provide security at their wellheads. In addition, the security system has been connected to current telemetry to allow for notification of unauthorized entry into well sites.</li> </ul>

- 4. Village of Beech Bottom has completed a \$4,856 project to install a security system and drinking water protection signs along the major highway within their wellhead protection area.
- 5. City of Wellsburg Water Board has completed a \$10,620 project to install a security system, wellfield illumination, and drinking water protection signs along the major highway within their wellhead protection area
- 6. Preston County Public Service District #4 has completed a \$26,553 project to install a fence to protect wellheads and electrical control panels from vandalism or contamination. In addition to physical security, Preston County Public Service District #4 installed pressure transducers in their wells to analyze the aquifer to prepare to produce adequate water quantities to facilitate future growth in the area.
- 7. Red Sulphur Public Service District has completed a \$13,122 project to develop land use policies and practices that will protect source water resources. This project is part of an ongoing county-wide source water protection plan.
- 8. New Cumberland Water/Sewage Board has completed a \$6,836 project to install a fence and camera system to provide security at their wellheads.
- 9. Franklin completed a \$5,664 project to establish a monitoring station to allow for non-compliance sample analysis of their raw water to identify potential contaminants of concern from nearby PCS.

Funds were originally allocated to provide for wellhead protection planning at the City of Sistersville. However, this system did not develop the source, thus these funds will be utilized to provide for proposed projects selected to participate in the 2009 Wellhead Protection Grant Program.

		<ol> <li>2009 Sub-recipient Grant</li> <li>Parkersburg Utility Board has completed a \$21,424 project to install security fencing and overhead area lighting at three water supply wells. In addition, a total of 80 signs will be installed to identify to the public the boundaries of the Wellhead Protection Area, to provide contact information and explanation of facility purpose.</li> <li>New Martinsville Water and Sanitary Sewer Board has completed a \$69,988.00 project to properly abandon two wells and install a fence around a new well. A portion of the project costs (\$41,992.80) was funded through the 15% set-aside. The remainder (\$27,995.20) was funded from the 10%.</li> </ol>
2.	Wellhead protection plans improved.	See above.
3.	Source water protection activities implemented.	<ol> <li>2008 Sub-recipient Grants</li> <li>City of Parsons has completed a \$50,000 project to develop a Source Water Protection Plan, including an Emergency Response Plan to provide contingencies for emergencies including power outages and recurring flooding of the Cheat River. The plan will also address future water demands.</li> <li>Funds were originally allocated to provide for a hydrologic study at Mt. Top Public Service District and the development of a source water protection plan at Kingwood Water Works. However, these systems chose not to participate in the grant program; thus these funds will be utilized to provide for proposed projects selected to participate in the 2009 Source Water Protection Grant Program.</li> <li>2009 Sub-recipient Grants</li> <li>City of Hurricane has completed a \$16,168 to provide for</li> </ol>

security improvements at a new reservoir and a public awareness brochure.
2. City of Elkins has completed a \$53,915 project to provide
physical security measures for their source water. The water
plant has two impoundment sites. Both areas are susceptible to
dumping of waste and other contaminants. The impact of the
project will affect a majority of Randolph County citizens
because the City system also supplies outlying public service
districts.
3. Jefferson County Public Service District completed a
\$60,068.50 project to provide for a Preliminary Engineering
Report to study water reclamation activities that will preserve
and protect vulnerable groundwater.
4. New Martinsville Water and Sanitary Sewer Board has
completed a \$69,988 project to properly abandon two wells and
install a fence around a new well. A portion of the project
costs (\$27,995.20) was funded through the 10% set-aside. The remainder was funded from the 15%. See previous section.
5. Jefferson County Commission was awarded \$83,027 to provide
for three projects. The first regards their wellhead protection.
This project will establish ground water monitoring of water
quality and quantity in water wells located in the four major
watersheds in Jefferson County. Money from this grant will be
used to purchase data loggers, laboratory testing for water
quality and software for managing the data collected. The
second part of the project will be a pilot program consisting of
two elements: 1) education about harmful materials by creating
lessons to be used in the schools, distributing a handout to
families, and writing press releases for the media; 2) collection
of hazardous materials from home owners by a professional
agency set up at the Solid Waste Authority Transfer Station in

		<ul> <li>Kearneysville. The last part of the project is an effort to erect signs to raise awareness to source water protection areas. The grantee was granted a six (6) month extension to complete the project, spending \$83,027.</li> <li>6. Town of Cowen has applied for \$20,000 to provide security around their intake. A grant for \$14,735 has been approved recently. Their original project proposal became unviable.</li> <li>7. Clarksburg Water Board was awarded \$11,743 to educate our customers to be our security eyes and ears throughout Water Watchers program and promote safe drinking water not only during National Drinking Water Week but all year long. The project is complete, \$4,824.80 was spent.</li> </ul>
4.	Source water protection plans improved.	See above.
5.	Interim progress summaries issued.	Provide invoice and program reports.
6.	Raw data including sample analysis, physical lithologic characteristics, and borehole geophysical logs.	Contract has been signed and is currently being implemented.

**Progress Report of Supplemental Grant Funds Workplan:** The Wellhead Protection and Source Water Protection Grant Programs were designed to offer grant opportunities to local public water systems interesting in performing source water protection through: studies of water resources, plans for protection, public outreach, etc. Grantees from these programs have been selected to receive and/or awarded funds provided for in Activities F (10%) and E (15%): Source Water Protection Grants.

For the 2007 grant program three (3) grant projects were completed utilizing the Wellhead Protection Grant Program funds. These complete projects totaled \$35,383.

For the 2008 grant program nine (9) wellhead protection projects were completed totaling \$94,865. Funds for these awards are from the 15% set-aside. In 2008 one award was written for source water protection (from 10% set-aside) totaling \$50,000 for the City of Parsons and that work has been completed. Two additional PWSs were selected to participate in the grant program, but have given

notification that they will not proceed with their project and thus will not receive funding. The funds originally allocated for these source water projects are being utilized in the 2009 Source Water Protection Grant Program.

For the 2009 grant program ten (10) applicants were selected through the Wellhead Protection and Source Water Protection Grant Programs to receive awards that will utilize funding allocated in Activities F (10%) and E (15%) Source Water Protection Grants. Eight (8) projects totaling \$331,059.50 have been awarded; seven (7) are complete and one (1) is ongoing. Total funds disbursed is \$309,415.30, leaving a balance of \$21,644.20 obligated but not yet spent. Two (2) other projects became unviable and will not utilize funding.

Hydrologic Coal Mine Study- Project with the USGS, West Virginia Department of Environmental Protection and West Virginia Geological and Economic Survey (WVGES) to study the hydrological flow in abandoned coal mines in McDowell County, West Virginia. Implementation of the approved project tasks are continuing with a planned completion date in 2011. Joint funding agreement contracts have been signed for \$81,700 to USGS for period July 1, 2008-June 30, 2009; \$65,200 to USGS for period July 1, 2009-June 30, 2010, and for \$25,000 to WVGES for period October 1, 2008-September 30, 2009. One additional contract has been signed for the 2011 period for \$55,000. Estimated total project cost to complete this study is \$650,000 with WV BPH/OEHS share being approximately \$226,900. A total of \$199,400 has been disbursed to-date for this activity.

**Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):** No variance or deviation from plans required. Project is on schedule. Scheduling and planning for the 2011 Grant Program provided funds are available. A total of \$689,062 has been disbursed todate for both activities (Mini Grants and the USGS Study).

### I. Activity G (10%): Water Distribution (WD) and Chief Operator Training

**II. Activity G (10%) Description**: This activity will establish and conduct Water Distribution and Chief Operator training. A contractor will:

- Create the following courses:
  - Water Distribution operator training.
  - Chief Operator training.
- Develop materials and hold courses in WV.
- Provide and/or arrange for course instructors.

- Schedule and conduct first year courses.
- Develop and produce written examinations (Water Distribution only).
- Issue certificates for course completion.
- Maintain course rosters and records.
- Provide a post-course evaluation and make appropriate course modifications.

### **III. Outcomes/Benefits:**

	Outcomes/Benefits:	0 + 0 +
No.	Planned Outcomes	Outcome Status
1.	Water Distribution and Chief Operator training program developed.	WD Course contract (EHS80370 effective 4/1/08 for \$48,925 with the WV Environmental Training Center) was completed 3/31/09. The 1 <sup>st</sup> contract renewal 4/1/09, was completed 3/31/10, for \$16,280. The 2 <sup>nd</sup> contract renewal 4/1/10, was completed 3/31/11, for \$21,100.  Chief Operator Course contract (EHS80373 effective 6/15/08, for \$17,600 total with the WV Rural Water Association) was completed 6/14/09. The 1 <sup>st</sup> contract renewal 6/15/09, was completed 6/14/10, for \$14,600. The 2 <sup>nd</sup> contract renewal
2.	Water Distribution and Chief Operator classes taught.	6/15/10, was completed 6/14/11, for \$14,600.  During the reporting period, 5 WD courses were taught (7/20/2010, 10/19/2010, 11/1/2010, 1/10/2011, 3/14/2011).  During the reporting period, 10 Chief Operator courses were taught (7/15/10, 7/22/10, 8/26/10, 9/23/10, 10/20/10, 11/18/10, 1/13/2011, 2/17/2011, 3/17/2011, and 4/07/2011)
3.	Water Distribution and Chief Operators trained, tested and certified, where applicable.	59 trained in Water Distribution. 112 Chief Operators trained.

		Properly trained and certified operators are an
4.	Public health protected through improved water system operation.	essential component of the multi-barrier approach to
		protecting drinking water.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** Total planned for this activity is \$135,745 from the 10% set-aside. As of 6/30/11, \$133,105 has been expended.

#### VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	Teach remaining WD and Chief Operator classes.	Contracts and classes have been completed.
2.	Course records and certificates maintained.	All required documentation provided for courses taught during this reporting period.

**Progress Report of Supplemental Grant Funds Workplan:** Water Distribution and Chief Operator contracts are in place to provide the required training across the state in accordance with operator regulations (64CSR4). The WD course was approved for 23 hours continuing education for operator renewal (CEH2008-052). The Chief Operator course was approved for 6 hours continuing education for operator renewal (CEH2008-063).

Contracts have developed new operator training resources, minimized travel costs since offered statewide and assisted operators and systems with state and federal rule compliance to ultimately enhance public drinking water protection.

**Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):** Failure to meet course participant minimum requirements caused 2 WD courses to be cancelled as per the contract. Project was completed on schedule.

### I. Activity H (10%) & G (15%): Annualized Salaries

II. Activity H (10%) & G (15%) Description: Annualized salaries for Fiscal year 2011 have been earmarked as part of the redirection plan. Any salaries that are awarded in this grant application will be for the State Fiscal Year 2012. Any of this money that remains unspent as of 6/30/2011, will be redirected into different areas with the next grant application.

#### III. Outcomes/Benefits:

No.	Planned Outcome	Outcome Status
1.	Oldest grants will be closed out first as funds are disbursed.	Oldest grants are closed out in order.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity is planned to use \$277,857 from the 10% set-aside and an additional \$131,151 from the 15% set-aside unexpended funds. The total planned for this activity is \$409,008 from both set-asides.

VI. Schedules and Major Outputs:

No.	Planned Output	Output Status
1.	Oldest remaining grant is closed out.	Grant 14364 (FFY 2006) was completed in September '10.

#### **Progress Report of Supplemental Grant Funds Workplan:**

Grant 14364 has reached the goal of spending all monies available for salaries by September 2010. Salaries will be redirected to the next oldest grant for the SFY 2011. This redirection will remain in the salaries classification and will be transparent (no effect) in the Planned Activities Budget Report.

### I. Activity I (10%) & H (15%): Fringe Benefits

II. Activity I (10%) & H (15%) Description: Fringe benefits for annualized salaries for SFY 2011 have been earmarked as part of the redirection plan. Any fringe benefits that are awarded in this grant application will be utilized in the SFY 2012. Any of this money that remains unspent as of 6/30/2011, will be redirected into different areas with the next grant application.

#### **III. Outcomes/Benefits:**

No.	Planned Outcome	Outcome Status
1.	Oldest grants will be closed out first as funds are disbursed.	Oldest grants are closed out in order.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity is planned to use \$104,581 from the 10% set-aside and an additional \$50,393 from the 15% set-aside unexpended funds. The total planned for this activity is \$154,974 from both set-asides.

VI. Schedules and Major Outputs:

No.	Planned Output	Output Status
1.	Oldest remaining grant is closed out.	Grant 14364 (FFY 2006) was completed in September '10.

**Progress Report of Supplemental Grant Funds Workplan:** Grant 14364 has reached the goal of spending all monies available for fringe benefits by end of September 2010. Fringe benefits will be redirected to the next oldest grant for the SFY 2011. This redirection will remain in the fringe benefits classification and will be transparent (no effect) in the Planned Activities Budget Report.

### I. Activity J (10%) & I (15%): Current Expense

**II. Activity J (10%) & I (15%) Description:** Current Expense for the SFY2011 has been earmarked as part of the redirection plan. This includes, but not limited to, rent, office supplies, vehicle expense, copiers, phone, fax, postage, etc. Any current expense awarded in this grant application will be utilized in SFY 2011. Any of this money that remains unspent as of 6/30/2011, will be redirected into different areas with the next grant application.

#### **III. Outcomes/Benefits:**

No.	Planned Outcome	Outcome Status
1.	Oldest grants will be closed out first as funds are disbursed.	Oldest grants are closed out in order.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity is planned to use \$882,464 from the 10% set-aside and an additional \$1,168,915 from the 15% set-aside unexpended funds. The total planned for this activity is \$2,051,379 from both set-asides.

VI. Schedules and Major Outputs:

No.	Planned Output	Output Status
1.	Oldest remaining grant is closed out.	Grant 14364 (FFY 2006) was completed in September '10.

**Progress Report of Supplemental Grant Funds Workplan:** Grant 14364 has reached the goal of spending all monies available for current expenses by end of September 2010. Current expenses will be redirected to the next oldest grant for the SFY 2011. This redirection will remain in the current expenses classification and will be transparent (no effect) in the Planned Activities Budget Report.

### I. Activity K (10%) & J (15%): Indirect Costs

**II. Activity K (10%) & J (15%) Description:** Indirect costs associated with annualized salaries have been earmarked as part of the redirection plan. Any indirect cost awarded in a future grant application will be utilized in SFY 2011. Any of this money that remains unspent as of 6/30/2011, will be redirected into different areas with the next grant application.

#### **III. Outcomes/Benefits:**

No.	Planned Outcome	Outcome Status
1.	Oldest grants will be closed out first as funds are disbursed.	Oldest grants are closed out in order.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity is planned to use \$107,777 from the 10% set-aside and an additional \$86,786 from the 15% set-aside unexpended funds. The total planned for this activity is \$194,563 from both set-asides.

VI. Schedules and Major Outputs:

No.	Planned Output	Output Status
1.	Oldest remaining grant is closed out.	Grant 14364 (FFY 2006) was completed in September '10.

**Progress Report of Supplemental Grant Funds Workplan:** Grant 14364 has reached the goal of spending all monies available for indirect cost by end of September 2010. Indirect cost will be redirected to the next oldest grant for the SFY 2011. This redirection will remain in the indirect cost classification and will be transparent (no effect) in the Planned Activities Budget Report.

### I. Activity D (15%): WV Utility Management Institute

**II. Activity D** (15%) **Description**: This activity will develop a WV Utility Management Institute (UMI) providing professional training, leading to a Utility Manager Certification. It will create a training curriculum leading to a Utility Manager Certification awarded to utility managers successfully completing all UMI courses.

The contractor will:

- Create the following courses:
  - Utility Management.
  - Utility Organization, Regulation and Law.
  - Modern Technology and Utility Management.
  - Human Resource Management for Utilities.
  - Utility Finance and Administration.
  - Public and Government Relations in Utility Management.
- Develop materials and provide to BPH.

#### III. Outcomes/Benefits:

	outcomes, benefits:	
No.	Planned Outcomes	Outcome Status
1.	A WV UMI program is developed.	UMI program completed in August 2010.
2.	Participating water system staff developed management expertise.	Grant agreement is in progress for a provider to do training.
3.	Better water system management, improved water system TMF capacity, and long-term viability.	Grant agreement is in progress for a provider to do training.
4.	Public health protected through improved water system management.	UMI curricula is completed and grant agreement is in progress for a provider to do training.

**IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.

**V. Resources:** This activity used a total of \$197,709 from the 15% set-aside funds. This activity will use an additional \$25,000 from the 15% set-aside.

### VI. Schedules and Major Outputs:

No.	Planned Outputs	Output Status
1.	UMI curricula developed.	Contract completed in August 2010.

#### **Progress Report of Supplemental Grant Funds Workplan:**

A grant agreement was initiated with OEHS and West Virginia University National Environmental Services Center (WVU-NESC) for this project. WVU-NESC encountered considerable delays with the project due to software issues and the curriculum being over ten years old. Due to these significant delays WVU-NESC requested a twelve month no cost extension to allow additional time to complete the project. It should be noted that WVU-NESC will no longer be responsible for conducting the pilot phase of the project so resources can be utilized in completing the respective modules. Although the project was completed in August 2010 and it was previously reported that it will no longer be listed in this report, we are entering into a grant agreement with a provider to do training using this curricula for the next year.

**Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):** A grant agreement is being developed for a contract provider to perform the first year of training for water system officials.

### I. Activity M (10%) & L (15%): Lab Equipment

**II. Activity M (10%) & L (15%) Description:** OEHS will purchase an Inductively Coupled Plasma – Mass Spectrometer, Discrete Analyzer, Glassware Washer, Gas Chromatograph – Mass Spectrometer, Gas Chromatograph – Electron Capture Detector, Sample Prep Unit, and a High Performance Liquid Chromatograph for the State Laboratory to aid in analysis of water samples and troubleshooting contamination problems.

### III. Outcomes/Benefits:

No.	Planned Outcome	Outcome Status
1.	The state will be able to analyze water samples and provide accurate results.	Equipment is operational at this time.

- **IV. EPA Key Performance Activity Measures (PAMs):** There is no specific PAM except for the expenditure of grant funds which will be reported at the end of this report.
- **V. Resources:** This activity is planned to use \$280,000 from the 10% set-aside and an additional \$220,000 from the 15% set-aside unexpended funds. The total planned for this activity is \$500,000 from both set-asides.

VI. Schedules and Major Outputs:

No.	Planned Output	Output Status
1.	The state lab will be equipped with an Inductively Coupled Plasma – Mass Spectrometer, Discrete Analyzer, a Glassware Washer, Gas Chromatograph/ Mass Spectrometer, and an Inductively Coupled Plasma –Electron Capture Detector.	Equipment is operational at this time.
2.	The state lab will be equipped with three Gas Chromatographs to analyze for pesticides, herbicides, and synthetic organic compounds.	Equipment has not been purchased yet.

**Progress Report of Supplemental Grant Funds Workplan:** A proposal from the state lab staff for the above mentioned equipment has been reviewed by OEHS and an agreement has been made for the purchase of this equipment. The Inductively Coupled Plasma – Mass Spectrometer, Discrete Analyzer and the Glassware Washer have been purchased for a total of \$164,979 and a Gas Chromatograph - Mass Spectrometer for \$53,341.64 has also been purchased. In spring 2011 the OI Analytical Purge and Trap sample prep unit for VOC and THM analysis was installed and upgraded for \$10,667.

**Explanations of Variance (\$) and Deviation from Plans (schedules and outputs):** Bids for the three remaining GCs were received but were more than the estimate. The bids may be rejected & the bids revised to get new bids that are affordable.

## **Financial Status of Set Asides:**

The following tables will provide a snapshot picture of the unexpended set aside funds and the redirection of those funds to the Supplemental Work Plan activities.

						i abie to	r Realrecti	ion of Prior G	rant Funds 15	5% Set-Aside						
					ı	Redirection	o Overall S	Sheet (Inclu	des Salaries,	Fringes, &	etc)					
		1	Activity A/15%	Activity B/15%	Activity C/15%	Activity D/15%	Activity E/15%	ActivityF/15%	Activity G/15%	Activity H/15%	Activity J/15%	Activity I/15%	Activity K/15% Activity L/15%			
Org 3044 15%																
Grant #					United States Geological				Projected Payroll 3 Months	Projected Fringes 3 Months		Projected Indirect 3 Months July - September	lah			
	FIMS Balances as o		Capacity Development	GIS Mapping	Survey Coal Study	Utility Management	SWAP MiniGrants	Project & Planning Design	July - September	July - September	July - September 2011 Pay Periods	2011 Pay Periods	SWAP Technical Equipment	Grant Balance	Committed Balance	
15384 balance	\$ 45,4	75.78												\$0.00	)	
Committed 15384								\$ 45,474.05			\$ -	\$ -			\$ 45,474.05	
Not Committed -Pending 15384											\$ 1.73					
Not Committed 15384																
16569 balance	\$ 166,2	37.15												\$0.00	)	
Committed 16569							\$ 9,166.64	\$ 139,966.72			\$ 1,444.35				\$ 150,577.71	
Not Committed -Pending 16569												\$ -				
Not Committed 16569											\$ 15,659.44					
17779 balance	\$ 315,9	81.73												\$0.00	)	
Committed 17779								\$ 276,049.04			\$ 31,589.57				\$ 307,638.61	
Not commited -Pending 17779									\$ -	\$ -		\$ -				
Not Committed 17779											\$ 8,343.12					
19106 balance	\$ 2,068,9													\$0.00		
Committed 19106			\$ 107,000.00	\$ 100,398.06			\$ 18,333.36	\$ 218,000.00			\$ 19,549.00		\$ 150,000.00		\$ 613,280.42	
Not committed -Pending 19106						¢ 25 000 00			\$ 131,151.00	\$ 50,392.74	¢ 1 002 227 56	\$ 86,786.07				
Not Committed 19106	¢2.500.0	22.45	¢4.07.000.00	¢400,200,00	¢0.00	\$ 25,000.00	627 500 00	¢670,400,04	Ć424 454 00	¢50,202,74	\$ 1,092,327.56	¢06.706.07	\$ 70,000.00	¢0.00	¢4.446.070.70	
	\$2,596,6		\$107,000.00 ount is not under o	\$100,398.06				\$679,489.81	\$131,151.00	\$50,392.74	\$1,168,914.77	\$86,786.07	\$0.00 \$220,000.00	\$0.00	\$1,116,970.79	

						Includes	both F	edera	and St	ate							
						Table for Redire	ection of Pric	r Grant Fu	ınds 10% Set	-Aside							
					Redirection	on Overall She	et (Include	s Salaries	. Fringes. &	etc)							
Org 3045 10%							(		,								+
		Activity A/10	Activity B/10% A	ctivity C/10%	Activity D/10%	Activity E/10%	Activity F/10%	Activity G/10	Activity H/10%	Activity I/10%	Activity J/10%	Activity K/10%	Activity L/10%	Activity M/10%			
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									Projected	Projected		Months		Lab		Committed	_
							Source Water					July -		Lub		Committee	+
	FIMS Balances as	Project & Planning				Security	Mini Protection	Operator	Payroll 3 Months July - September	Fringes 3 Months		September	SWAP		Grant		
Grant #	of 6-30-2011	Design	Capacity Dev.	GIS Mapping	AWOP & PBT	Enhancements	Grants	Certification	2011 Pay Periods	2011 Pay Periods	2011 Pay Periods	Pay Periods	Technical	Equipment	Balance	Total	
5384 balance	\$ 11,622.93														\$0.00		
Committed 15384		\$ -									\$ 11,622.93					\$ 11,622.93	
lot Committed -Pending 15384												Ş -					
lot Committed 15384	ć 6.454.00														ć0.00		
6569 balance	\$ 6,454.00					¢	<u> </u>				\$ 2 337 58				\$0.00		
Committed 16569 Not Committed -Pending 16569						\$ -	\$ -		\$ -	\$ -	\$ 2,337.58	\$ -				\$ 2,337.58	
lot Committed 16569									- ډ	<del>-</del>	\$ 4,116.42	Ş -					+
	\$ 756,656.95										3 4,110.42				\$0.00		+
Committed 17779	7 730,030.33						\$ 6,909.20	\$ -			\$ 26,611.02		\$ 538,488.44		Ş0.00	\$ 572,008.66	
lot commited -Pending 17779							\$ 3,303.20	_	Ś -	\$ -	2 23,011.02	\$ 11,780.14	\$ 555,400.44			Ç 3.2,000.00	
lot Committed 17779										•	\$ 172,868.15	,					
	\$ 1,337,547.80				\$ -						, , , , , , , , , , , , , , , , , , , ,				\$0.00		
ommitted 19106	. , ,.		\$ 44,000.00			\$ 8,340.0	0 \$ 14,735.00	\$ 8,040.00			\$ 13,802.94				, ,,,,,,	\$ 88,917.94	
ot commited -Pending 19106									\$ 277,857.00	\$ 104,581.47	'	\$ 95,996.53				,	
lot Committed 19106					\$ 43,000.00	\$ 49,096.0	0 \$ 26,993.47				\$ 651,105.39						
,	\$ 2,112,281.68	\$ -	\$ 44,000.00 \$	-	\$ 43,000.00	\$ 57,436.0	0 \$ 48,637.67	\$ 8,040.00	\$ 277,857.00	\$ 104,581.47	\$ 882,464.43	\$ 107,776.67	\$ 538,488.44	\$ - !	\$ 0.00	\$ 674,887.11	4
	Blue means dollar a	•	nder contract but is	in the works to	be under contract				,							,	

									F	edera	al Onl	У											
							•	Table for Redired	ctio	n of Prio	r Grant F	unds 10% Se	et-A	side									
						D.																	
						Κŧ	earrectic	on Overall Shee	ינ (ו	nciuaes	Salaries	, riinges, o	ı eı	(C)									
Org 3045 10%																							
		Activity A/10	Activity B/	10%	Activity C/10%	Acti	vity D/10%	Activity E/10%	Act	ivity F/10%	Activity G/1	0 Activity H/10%	Ac	ctivity I/10%	Activity J/109	6 Activity K/109	% Activity	/L/10%	Activity M/109	%			
															Projected	Indirect 3							
		Project &							So	urce Water		Projected		Projected	Current Expens				Lab		Cc	mmitted	
	FIMS Balances as	Planning						Security	١.	Mini	Operator	Payroll 3 Months		ringes 3 Months	3 Months	July - September	SW	IΔD		Grant			
Grant #	of 6-30-2011		Compositus D		CIC Mannina		VOP & PBT	•	۱ ۲	Protection	Certification	July - September		luly - September	July - Septemb		Techi		Equipment	Balance		Total	
15384 balance	\$ 5,963.87	Design	Capacity D	ev.	GIS Mapping	AW	VUP & PBI	Enhancements		Grants	Certificatio	1 2011 Pay Periods	2	2011 Pay Periods	2011 Pay Perio	ds Pay Periods	recni	nicai	Equipment	\$0.00		TOTAL	
Committed 15384	\$ 3,303.07	¢	¢		¢	ċ		ć	4		¢	<u>,</u>	4		\$ 5,963.	07 ¢	4		¢	Ş0.00	ċ	5,963.87	
Not Committed -Pending 15384		> -	<u>ې</u> .		- د -	ç		\$ -	Ş	-	۶ - د	-   c -	ç	_	\$ 5,903.	5/ 5 -	Ş	-	\$ - \$ -		Ş	5,903.87	
Not Committed 15384		\$ -	ζ		\$ -	ς		\$ -	Š		\$ -	\$ -	Š		Š -	Ş -	ζ		Ş -				
L6569 balance	\$ 3,227.00	Y	Y		7	Y		Ψ	7		7	7	7		Y	7	7		Y	\$0.00			_
Committed 16569	ÿ 3,227.00	\$ -	\$		\$ -	\$	-	\$ -	\$	-	\$ -	\$ -	\$	-	\$ 1,168.	79 \$ -	\$	-	\$ -	70.00	\$	1,168.79	
Not Committed -Pending 16569		š -	Ś	. 1	š -	Ś	- 1	Š -	Ś	-	š -	Š -	Ś	_	\$ -	Š -	Ś	-	Š -		Y	1,100.75	
Not Committed 16569		Š -	Ś		š -	Ś	_	š -	Ś	-	Š -	Š -	Ś	_	\$ 2,058.	21 \$ -	Ś	-	š -				
7779 balance	\$ 378,328.48		· ·		•			<u>'</u>	T.			<u>'</u>			, , , , , , , , , , , , , , , , , , , ,	<u>'</u>				\$0.00			
Committed 17779	, , , , , ,	\$ -	\$		\$ -	\$	-	\$ -	\$	3,454.60	\$ -	\$ -	\$	-	\$ 13,305.	51 \$ -	\$ 269,	,244.22	\$ -	,		286,004.33	
lot commited -Pending 17779		\$ -	\$		\$ -	\$	-	\$ -	\$	-	\$ -	\$ -	\$	-	\$ -	\$ 5,890.07	\$	-	\$ -			,	
lot Committed 17779		\$ -	\$		\$ -	\$	-	\$ -	\$	-	\$ -	\$ -	\$	-	\$ 86,434.		\$	-	\$ -				
9106 balance	\$ 844,519.70																			\$0.00			
Committed 17779		\$ -	\$ 27,781	.34	\$ -	\$	-	\$ 5,265.83	\$	9,303.59	\$ 5,076.41	. \$ -	\$	-	\$ 8,715.0	9 \$ -	\$	-	\$ -		\$	56,142.26	
Not commited -Pending 17779		\$ -	\$	-	\$ -	\$	-	\$ -	\$	-	\$ -	\$ 175,437.25	5 \$	66,032.12	\$ -	\$ 60,611.64	\$	-	\$ -				
Not Committed 17779		\$ -	\$	-	\$ -	\$	27,149.94			17,043.52	\$ -	\$ -	\$	-	\$ 411,104.		\$	-	\$ -				
	\$ 1,232,039.05	\$ -	\$ 27,781	.34	\$ -	\$	27,149.94	\$ 36,264.75	\$	29,801.71	\$ 5,076.41	\$ 175,437.25	5 \$	66,032.12	\$ 528,749.	51 \$ 66,501.71	\$ 269,	,244.22	\$ -	\$ 0.00	\$	349,279.25	
	Blue means dollar	amount is not u	ınder contrac	but i	is in the works to	be ur	nder contract	in the future.															